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IN THE UNITED STATES DISTRICT COURT FOR THE  
DISTRICT OF UTAH, NORTHERN DIVISION

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ICON HEALTH & FITNESS, INC.,

Plaintiff,

v.

HOIST FITNESS SYSTEMS, INC., et al.,

Defendants.

**MEMORANDUM DECISION  
AND ORDER**

Case No. 1:10-cv-193 CW

Judge Clark Waddoups

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**INTRODUCTION**

ICON Health & Fitness, Inc. asserts that Vectra Fitness, Inc.<sup>1</sup> has infringed three patents pertaining to a cable crossover exercise machine. Two of those patents are before the court for claim construction and cross motions for summary judgment. They are U.S. Patent No. 6,238,323 (“the ‘323 Patent”) and U.S. Patent No. 7,282,061 (“the ‘061 Patent”).

ICON seeks partial summary judgment that Vectra’s VX-FT exercise machine infringes claim 1 of the ‘061 Patent. In turn, Vectra seeks summary judgment of non-infringement for both the ‘323 and ‘061 Patents. It contends it designed around ICON’s patents and therefore its products do not read on each of the elements. For the reasons discussed below, the court denies ICON’s motion for partial summary judgment and grants in part and denies in part Vectra’s motion for summary judgment.

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<sup>1</sup> Defendants Hoist Fitness Systems, Inc., Torque Fitness, LLC, and Tuff Stuff Fitness Equipment, Inc. have previously been dismissed. Vectra is the only remaining defendant.

## **BACKGROUND**

The ‘061 Patent is a continuation patent and the ‘323 Patent is the parent patent. “The patents claim an exercise apparatus comprising a resistance assembly, two adjustable extension arms that pivot on an axis substantially parallel to the axis of rotation of a pulley at the end of each arm, and a cable linking the resistance assembly to the arms.” *Free Motion Fitness, Inc.*<sup>2</sup> v. *Cybex Int’l, Inc.*, 423 F.3d 1343, 1345 (Fed. Cir. 2005). The invention “improved the traditional cable crossover device by taking . . . a very large device requiring two separate and opposed weight stacks and converting it into a much smaller device having two adjustable extension arms to accomplish the [same purpose].” ICON Memo. in Supp., at 10 (Dkt. No. 22).

## **ANALYSIS**

### **I. STANDARDS OF REVIEW**

#### **A. SUMMARY JUDGMENT**

ICON asserts that Vectra has infringed its ‘061 Patent either by literal infringement or under the doctrine of equivalents. “Infringement, whether literal or under the doctrine of equivalents, is a question of fact.” *EMD Millipore Corp. v. AllPure Techs., Inc.*, 768 F.3d 1196, 1200–01 (Fed. Cir. 2014) (quotations, citation, and alteration omitted). Summary judgment may be granted, however, “where there exists no issue of material fact and the moving party is entitled to judgment as a matter of law.” *Stryker Corp. v. Zimmer, Inc.*, 782 F.3d 649, 657 (Fed. Cir. 2015) (citing Fed. R. Civ. P. 56(c)) (quotations and other citations omitted). Likewise, “a court may determine infringement on

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<sup>2</sup> Free Motion® is “ICON’s primary commercial brand.” ICON Memo. in Supp., at 10 (Dkt. No. 22). Unless otherwise noted, page numbers for docketed items refer to the ecf number at the top of the page.

summary judgment when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device.” *EMD Millipore Corp.*, 768 F.3d at 1201 (quotations and citation omitted).

## **B. CLAIM CONSTRUCTION**

The first step of an infringement analysis is claim construction. *Alcohol Monitoring Sys. v. Actsoft, Inc.*, 414 Fed. Appx. 294, 298 (Fed. Cir. 2011) (citation omitted). “The purpose of claim construction is to ‘determine the meaning and scope of the patent claims asserted to be infringed.’” *02 Micro Int’l, Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quotations, citation, and alteration omitted). Disputes about the meaning and scope of a claim must be resolved by the court, not the jury. *See id.*

“Although it is appropriate for a court to consider the accused device when determining what aspect of the claim should be construed,” claims are construed in “light of the claim language [and] not in light of the accused device.” *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1367 (Fed. Cir. 2008) (quotations and citations omitted) (emphasis in original). Claim construction centers on the claim because “that is the language the patentee has chosen to particularly point out and distinctly claim the subject matter which the patentee regards as his invention.” *Source Vagabound Sys. v. Hydrapak, Inc.*, 753 F.3d 1291, 1299 (Fed. Cir. 2014) (quotations, citations, and alterations omitted). Claims, however, “are part of a fully integrated written instrument,” and therefore “must be read in view of the specification.” *Id.* (quotations and citations omitted). The prosecution history also may inform the court about proper construction of a claim, “including resolving ambiguities.” *World Class Tech. Corp. v. Ormco Corp.*, 769 F.3d 1120, 1123 (Fed. Cir. 2014) (citations omitted).

In this case, Vectra's accused product puts in dispute certain claim terms. ICON asserts claims construction is not necessary. Vectra contends the terms may be understood only by examining the specification and prosecution history of the patents. As discussed below, the court agrees that construction of certain patent terms is necessary before it can determine infringement.

## **II. EXTENSION ARM**

### **A. Construction**

The parties dispute the meaning of "extension arm." The relevant language states: "the first end of the first extension arm further including a pulley."<sup>3</sup> '061 Patent, col. 8:5-7 (Dkt. No 29-2). Vectra designed its product so that the pulley is located on the flange. Thus, the crux of the dispute between the parties is whether the extension arm necessarily includes the flange.

ICON contends "extension arm" means, "Any appendage that extends from a main body." In contrast, Vectra contends the term means, "The elongated part of the overall device that extends the cable in front of the device. It includes a first end which is pivotally coupled adjacent to the resistance assembly at a pivot point, but does not contain the semicircular flange." For the reasons discussed below, the court concludes "extension arm" means "an appendage extending from the main structure of the device, not including the semicircular flange."

### **B. Specification**

Whether the extension arm includes the semicircular flange is not clear from the claim language. Indeed, the word "flange" is never mentioned in Claim 1. When construing a patent,

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<sup>3</sup> The same or similar language is found in each independent claim of the '323 and '061 Patent. Although the court's discussion focuses on the '061 Patent in this section, nothing in the patents or the prosecution history indicates that "extension arm" is used differently in the two patents.

however, the word “comprising” means the apparatus includes at least each of the elements stated, but it may contain additional parts as well and still fall within the scope of a claim. *Free Motion Fitness, Inc.*, 423 F.3d at 1347 (citation omitted). Here, the preamble of Claim 1 states it is claiming “[a]n exercise apparatus, *comprising* . . . .” ‘061 Patent, col. 7:63 (Dkt. No. 29 2) (emphasis added). Thus, Claim 1 may include a “flange” and still fall within the scope of the claim.

Although “flange” is not mentioned in Claim 1, it is discussed in the specification. First, it states that “[t]he semicircular flange 78 is positioned substantially parallel to the plane on which the first extension arm 12 rotates.” *Id.* at col. 4:28 29. This point is then expanded when the specification states “[t]he semicircular flange assembly 178 includes a pair of opposed flat plates and is mounted to lie within the plane in which the first extension arm 112 rotates.” *Id.* at col. 6:55 57. The specification further states “[t]he first extension arm 112 is pivotally coupled, at a position near the first end 160 of the extension arm 112, to a semicircular flange assembly.” *Id.* at col. 6:52 54. These three parts of the specification support that the flange is a separate part of the invention that has its own components and is coupled to the extension arm rather than being a part of the extension arm.

Next the specification states:

The first extension arm 112 is pivotally coupled in a manner allowing a user to select a desired orientation for the extension arm 112 and lock the extension arm 112 in place. Specifically, the first extension arm 112 includes a locking hole 170 located adjacent a pivot hole 172 through which a pivot pin 174 passes *to pivotally couple the first extension arm 112 to the semicircular flange assembly 178*, and ultimately, the weight stack 124. The locking hole 170 is aligned with a series of flange holes 176 formed in *the semicircular flange assembly 178 of the weight stack 124*.

*Id.* at col. 6:62 74 (emphasis added). Specifying that the extension arm is coupled to the

semicircular flange by passing a pin through the hole on the extension arm and a separate hole on the semicircular flange again supports that the flange is a separate component that is coupled to rather than being a part of the extension arm. Moreover, the specification states the semicircular flange assembly is on the weight stack, which again indicates the flange is not on the arm. The court therefore concludes the specification is consistent with Vectra's construction.

### C. Previous District Court Construction

ICON nevertheless contends that Vectra's proposed construction is incorrect based on a prior ruling by Judge Bruce S. Jenkins. In 2003, Judge Jenkins construed "the 'extension arm' to include both the extension device and the casting<sup>4</sup> which locks the extension arm in various positions." *Free Motion Fitness, Inc. v. Cybex Int'l, Inc.*, 311 F. Supp. 2d 1297, 1304 (D. Utah 2003). He did so by looking at the language of Claim 8. Claim 8 states:

The exercise apparatus of claim 1, wherein the first *extension arm includes a first locking means* for selectively *locking the first extension arm in various positions* relative to the weight stack . . . .

'061 Patent, col. 8:54–57 (Dkt. No. 29-2) (emphasis added). Because the specification provides that "the first extension arm 112 includes a locking hole 170 located adjacent a pivot hole 172 through which a pivot point pin 174 passes to pivotally couple the first extension arm 112 to the semicircular flange assembly and ultimately, the weight stack," *id.* at col. 6:65–7:2, Judge Jenkins concluded the casting is part of the locking means. And because Claim 8 states the locking means is part of the extension arm, he further concluded the casting was part of the extension arm. *Free Motion Fitness, Inc.*, 311 F. Supp. 2d at 1304 & n.4 (citing '061 Patent, col. 6:65–7:9).

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<sup>4</sup> ICON equates the casting at issue in *Free Motion* to the flange at issue here. The court assumes, without deciding, that ICON's contention is correct.

Claim 8 is a dependent claim. The Federal Circuit has recognized “that dependent claims can aid in interpreting the scope of claims from which they depend.” *North Am. Vaccine v. Am. Cyanamid Co.*, 7 F.3d 1571, 1577 (Fed. Cir. 1993). This means if the flange is part of the locking means, then Claim 8 would help inform the court whether the flange is also part of the extension arm.

The specification does not disclose, however, that the locking means necessarily includes the flange. Rather it states “[t]he locking hole is aligned with a series of flange holes formed “*in the semicircular flange assembly of the weight stack.*” ‘061 Patent, col. 7:2 4 (emphasis added). This strongly indicates the flange is separate from the locking means that is located on the extension arm. In truth, the court finds it an odd construction to state everything that locks the extension arm into place must be on the extension arm because it would mean the extension arm was locking itself into place instead of locking the extension arm into place via another structure. *See id.* at col. 4:33 36 (stating a pin passes through the locking hole to the flange hole “to lock the extension arm at a desire angular orientation relative to the weight stack”). Moreover, the other portions of the specification discussed above are in disharmony with the construction that the flange necessarily is part of the locking means on the extension arm. This court therefore does not adopt Judge Jenkins’ construction of “extension arm.”

#### **D. Stare Decisis**

Finally, ICON contends this court must construe “extension arm” as including the flange due to *stare decisis*. After Judge Jenkins construed certain terms of the ‘061 Patent, the case was appealed to the Federal Circuit. In the appellate decision, the Court stated the extension arm encompasses the swivel assembly, which is referred to as the flange in this case. *Free Motion*

*Fitness, Inc.*, 423 F.3d at 1345. Notably, none of the parties challenged Judge Jenkins’ construction of extension arm. Thus, when the Federal Circuit made that statement, it was in the *background* section of its opinion, and it did so without analysis because the issue of how “extension arm” should be construed was not before the Court.

The Federal Circuit has stated “[s]tare decisis applies only to legal issues that were actually decided in a prior action.” *Beacon Oil Co. v. O’Leary*, 71 F.3d 391, 395 (Fed. Cir. 1995) (citations omitted). Because the Court did not actually decide whether Judge Jenkins’ construction of “extension arm” was correct, *stare decisis* does not apply here.

### **III. Offset**

#### **A. Construction**

The parties also dispute the meaning of “offset,” as used in each of the independent claims for the ‘323 and ‘061 Patents. The relevant language states: “a pulley having an axis of rotation *offset* from the first pivot point.” ‘323 Patent, col. 8:13–14 (Dkt. No 29–5) (emphasis added). ICON contends “offset” means, “structurally separate.” Vectra contends the term means, “offset from the pivot point in such a position that the cable tension does not substantially vary as the extension arm is rotated.” For the reasons discussed below, the court concludes “offset” means “structurally separate.”

#### **B. Specification and Prosecution History**

“Claim terms are generally given the meaning those terms would have to a person of ordinary skill in the art.” *Saunders Group, Inc. v. Comfortrac, Inc.*, 492 F.3d 1326, 1331 (Fed. Cir. 2007) (citation omitted). ICON argues it would be error to adopt Vectra’s construction because it is contrary to the “plain and ordinary of meaning” of offset “to one of skill in the art.” *Thorner v. Sony*



*Computer Entm't Am LLC*, 669 F.3d 1362, 1367 (Fed. Cir. 2012) (citation omitted). Vectra disagrees based on the prosecution history of the '323 Patent. Because the '061 Patent is a continuation patent and the specifications for both Patents are almost identical, the prosecution history of the '323 Patent is relevant in construing the term in both patents. *Ormco Corp. v. Align Tech., Inc.*, 498 F.3d 1307, 1314 (Fed. Cir. 2007). When the '323 Patent application was filed on September 14, 1999, the claims did not mention offset, pulleys, pivots, or cable tension. Indeed, the term "offset" is found nowhere in the initial patent application. Because it is not in the specification nor any of the initial claims, the prosecution history is important to understand how the term came to be inserted in the '323 Patent.

After the United States Patent and Trademark Office ("PTO") rejected the first iteration of the patent claims as being anticipated by prior art, '323 Prosecution History, at 42, 51 (Dkt. No. 82-4), the inventor<sup>5</sup> amended the independent claims to add further elements. He also added the following dependent claim:<sup>6</sup>

The exerciser apparatus according to claim 1 wherein the first end of the first extension arm is pivotally supported adjacent the resistance assembly at a first pivot point and includes a pulley having an axis of rotation *offset* from the first pivot point *such that cable tension does not vary* as the first extension arm is selectively rotated . . . .

*Id.* at 58 (emphasis added). This was the first time the terms "offset" and "cable tension" appeared in the claims. These new dependent claims were consistent with the following language of the specification:

In an attempt to reduce the tightening or loosening of the cable 128

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<sup>5</sup> The inventor is Roy Simonson. ICON later acquired the Patents.

<sup>6</sup> The inventor added the same dependent claim to each of the independent claims.

as the first extension arm 112 is rotated, the first guide pulley is positioned to ensure that the cable tension does not vary as the extension arm is rotated. Specifically, and with reference to FIG. 9, the first guide pulley 184 is positioned to ensure that  $A:D \ A:F \ A:H$ .

‘323 Patent, col. 7:26 31 (Dkt. No. 29-5). Although the language does not mention “offset” expressly, it does discuss positioning the guide pulley so that the cable tension does not vary.

The inventor stated the new “claims further define[d] the invention,” and stood in contrast to prior art (Konoplyanko) that “disclose[d] an assembly wherein the pulley 8 rotates directly about the axis of rotation 4” rather than being offset from it. ‘323 Prosecution History, at 63 (Dkt. No. 82-4). Additional discussion explained it was important to offset the pulley from the pivot point so as to maintain constant cable tension. Ultimately, the inventor amended each of the independent claims to state the following:

the first end of the first extension arm includes a pulley having an axis of rotation offset from the first pivot point and rotating about an axis substantially parallel to the first axis such that cable tension does not vary as the first extension arm is selectively rotated . . . .

‘323 Patent, col. 8:13 16 (Dkt. No. 29-5).

When claims are construed, the court must “give effect to all of their terms.” *Fifth Generation Comput. Corp. v. IBM*, 416 Fed. Appx. 74, 79 (Fed. Cir. 2011) (citation omitted). If the court were to construe “offset” to mean “offset from the pivot point in such a position that the cable tension does not substantially vary as the extension arm is rotated,” it would be using the claim term to define itself. Additionally, because the independent claims of the ‘323 Patent expressly incorporate the limitation that “cable tension does not vary,” it would render that language

superfluous if offset were defined by that same limitation.<sup>7</sup> Thus, the court concludes “offset” should be defined simply as “structurally separate.”

#### **IV. CABLE TENSION DOES NOT VARY**

The parties also dispute the meaning of “cable tension does not vary,” but did not formally ask for construction of it. They nevertheless have provided briefing on the issue. The Federal Circuit has stated:

District courts have wide latitude in how they conduct the proceedings before them, and there is nothing unique about claim construction that requires the court to proceed according to any particular protocol. As long as the trial court construes the claims to the extent necessary to determine whether the accused device infringes, the court may approach the task in any way that it deems best.

*Ballard Med. Prods. v. Allegiance Healthcare Corp.*, 268 F.3d 1352, 1358 (Fed. Cir. 2001). The court concludes that construction of the term is necessary to resolve this matter and briefing is sufficient to inform the court about the parties’ respective positions on the term.

##### **A. Construction**

ICON argues that “cable tension” means load. Once a weight overcomes gravity, the load remains constant. Thus, according to ICON, cable tension always remains constant regardless of whether a pulley is offset or parallel to the axes of rotation. ICON Opp’n Memo., at 21–22 (Dkt. No. 103). ICON further argues the attorney who prosecuted the patent failed to realize this and therefore inserted a term that “does not really narrow the claim because it is always satisfied.” *Id.* at 22.

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<sup>7</sup> Although the ‘061 Patent does not expressly incorporate the “cable tension” limitation, as discussed below, it is still applicable to the ‘061 Patent. Thus, the court concludes the superfluity analysis applies to both patents.

In contrast, Vectra contends that “cable tension” means length and that the wrong term was used in the patents. Vectra Reply Memo., at 11 (Dkt. No. 111). It cites to the portion of specification that states:

In an attempt to reduce the tightening or loosening of the cable 128 as the first extension arm 112 is rotated, the first guide pulley is positioned to ensure that the cable tension does not vary as the extension arm is rotated. Specifically, and with reference to FIG. 9, the first guide pulley 184 is positioned to ensure that A:D A:F A:H.

‘323 Patent, col. 7:21–26 (Dkt. No. 29-5). With respect to the last sentence, ICON states, “[a]dmittedly, [it] suggests an incorrect supposition of some correlation between constant segment lengths and constant tension,” but argues the “mistake does not amount to a redefinition of “tension.” ICON Opp’n Memo., at 23 (Dkt. No. 103). Thus, when proffering their respective constructions, both parties contend some error was made in the patent.

“Tension” has several meanings. It can mean load or weight. It can also be expressed in terms of stress on an object when it is elongated or lengthened. Because the meaning of the term is not apparent, the prosecution history is again important to its construction.

## **B. Specification and Prosecution History of the ‘323 Patent**

In the background of the invention, the inventor notes the following problem with prior art:

Weight stack based exercise apparatuses . . . encounter problems as a result of the momentum created when the weight plates are lifted under the control of a cable. Specifically, when the weight plates are lifted upwardly at a fast pace, the generated momentum creates *momentary reductions and increases in the perceived force* encountered by the user of the exercise apparatus. *Such momentary changes are highly undesirable.*

‘323 Patent, col. 1:42–49 (Dkt. No. 29-5) (emphasis added). As a result, one object of the invention was to include “a series of pulleys which create a 4:1 load ratio.” *Id.* at col. 2:12–14. This would

help “reduce[] the inertia of the weight plates.” *Id.* at col. 3:12. Although the 4:1 load ratio and weight plate inertia are separate from the issues presently before the court, this background supports that changes in force were a concern.

The concern carried through when the inventor amended the application by adding:

the first extension arm . . . includes a pulley having an axis of rotation  
*offset* from the first pivot point *such that cable tension does not vary*  
as the first extension arm is selectively rotated . . . .

‘323 Prosecution History, at 58 (Dkt. No. 82-4) (emphasis added). Precluding variance in the cable tension is another way to express controlling forces or stress that negatively impact how the apparatus functions. Indeed, after the inventor distinguished Konoplyanko, he further asserted it would not have been obvious to modify Konoplyanko in light of Webber because

If the pulley 8 [in Konoplyanko] were to be offset from the axis of rotation 4 to meet the outstanding claims, the cable 9 would become oriented at an undesirable angular orientation, *creating forces oblique to the axis of rotation* for the pulley 8. *Such forces are highly undesirable and would destroy the apparatus disclosed by Konoplyanko.*

*Id.* (emphasis added). In other words, the inventor distinguished Konoplyanko because the pulley was not offset and even if it were offset in the same manner as the pulley in Webber, cable tension would vary to such a degree as to destroy the Konoplyanko apparatus. If “cable tension” means load rather than force, and load always remains constant as ICON contends, Konoplyanko’s apparatus would not have been destroyed by undesirable forces regardless of whether the pulley was offset. Thus, force remained at issue even after the weight plates were in motion.

In the inventor’s final iteration, he incorporated the limitations of “offset” and “cable tension” into each of the independent claims. He then reiterated that “*movement provided by the cables*

*passing over these pulleys is considered to be undesirable as the tension thereon will vary as the position of the extended arms is adjusted.” Id. (emphasis added).* In other words, the angular position of the arm created changes in how the cable moved over the pulley thereby altering the force or stress on the cable in Konoplyanko’s invention. Because each independent claim in the ‘323 Patent differed from Konoplyanko in that respect, the inventor argued that prior art was irrelevant. *Id.* at 78–79.

With respect to the Fitzpatrick invention that had an offset pulley, the inventor stated the pulley’s axis of rotation was transverse to the axis of rotation of the arm. *Id.* at 79. Therefore:

The *undesirable forces* created by the transverse orientation of the pulley 38 disclosed by Fitzpatrick is in direct contrast with the claimed invention where the axes of the respective pulleys are . . . substantially parallel to the axes of rotation of the extension arms. *The claimed assembly provides for virtually no variation in cable tension* when the extension arms are selectively rotated.

*Id.* (emphasis added). Hence, when distinguishing Konoplyanko and Fitzpatrick, the inventor focused on the undesirable tension or forces that were created if the pulley was not offset and parallel. The positioning of the pulley and pivot point overcame the tension problem to such a degree that there was “virtually no variation in cable tension.”

The amendments and argument further inform the court about the meaning of the portion of the specification that states:

In an attempt *to reduce the tightening or loosening of the cable* 128 as the first extension arm 112 is rotated, the first guide *pulley is positioned* to ensure that the *cable tension does not vary* as the extension arm is rotated. Specifically, and with reference to FIG. 9, the first guide pulley 184 is positioned to ensure that A:D A:F A:H.

‘323 Patent, col. 7:21–26 (Dkt. No. 29-5). Again, if cable tension were to mean load and the load

is always constant, there would be no tightening or loosening of the cable based on load variance. Yet, if the specification were to mean length, Figure 9 itself does not appear to hold length constant. On the other hand, if tension refers to force or stress, then it follows that cable tension can loosen (derail) or tighten (bind) if the pulley is in an undesirable position relative to the pivot point. Moreover, by holding the force constant so as to preclude tightening or loosening, then the desire for “A:D A:F A:H” could be met. The court therefore concludes that “cable tension does not vary” means “holding the force or stress constant as applied to the cable so as to preclude loosening or tightening of the cable.”

## **V. SCOPE OF THE ‘061 PATENT**

The Federal Circuit “presume[s], unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.” *Aventis Pharms., Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1380 (Fed. Cir. 2013). The ‘323 and ‘061 Patents both contain the limitations of “extension arm” and “offset.” Nothing in the prosecution history indicates the terms used in the ‘323 Patent were intended to have a different meaning in the ‘061 Patent. Accordingly, the court’s construction of those two terms apply to claims at issue in both Patents. ICON argues, however, that the cable tension requirement “has no application to the ‘061 patent because that language is conspicuously *absent* from the patent’s independent claims.” ICON Opp’n Memo, at 20 (Dkt. No. 103) (emphasis in original). Vectra argues the term applies based on prosecution disclaimer. For the reasons discussed below, the court concludes the limitation is implicit in Claim 1 of the ‘061 Patent.

### **B. Disclaimer in a Parent Patent**

“Prosecution disclaimer occurs when a patentee, either through argument or amendment,

surrenders claim scope during the course of prosecution. Amendments or arguments that are merely vague, ambiguous, or subject to other reasonable interpretation are not sufficient to surrender claim scope.” *Heuft Systemtechnik GmbH v. Indus. Dynamics Co., Ltd.*, 282 Fed. Appx. 836, 839 (Fed. Cir. 2008) (citing *Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1371 (Fed. Cir. 2007)). Instead, “for prosecution disclaimer to attach, the patentee’s actions must be ‘clear and unmistakable.’” *Id.* (quoting *Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325 (Fed. Cir. 2003)).

In *Heuft*, the Court addressed “equipment used in bottling plants” and whether the patentee had disclaimed “exit angles less than 30 degrees.” *Heuft Systemtechnik GmbH*, 282 Fed. Appx. at 837, 839 (alteration omitted). When Heuft prosecuted the ancestor patent, “no independent claim contained a limitation relating to the exit angle of the railings.” *Id.* at 839. After the examiner rejected all of the claims, Heuft “amended the independent claims to expressly recite an exit angle of 30 degrees to 100 degrees.” *Id.* at 840 (alteration omitted). Ultimately, the examiner allowed the claims. The Court stated it had “little difficulty concluding that Heuft clearly and unmistakably disclaimed exit angles less than 30 degrees.” *Id.* at 841 (alteration omitted).

Similarly, when the ‘323 Patent was prosecuted, none of the independent claims contained a limitation relating to offset, parallel pulleys, or cable tension. Only after rejection of all of the claims, including the inventor’s attempt to make the “offset” and “cable tension” limitations merely part of a dependent claim, did the inventor amend each of the independent claims to include the express limitations.

When the Federal Circuit previously analyzed the two Patents, it commented without deciding, that a disclaimer may have applied to the “claimed assembly.” *Free Motion Fitness, Inc.*



*v. Cybex International, Inc.*, 423 F.3d 1343, 1352 (Fed. Cir. 2005). The “claimed assembly” phrase was used during prosecution to distinguish Fitzgerald. ‘323 Prosecution History, at 79 (Dkt. No. 82-4). The entire focus of the prosecution, however, pertained to how the guide pulley functioned relative to other prior art. It had to be offset from the pivot point and be without cable tension variance to distinguish it from Konoplyanko. It further had to have an axis of rotation parallel to the first axis of rotation to distinguish it from Fitzgerald. Each of those elements working together were the claimed assembly, which was incorporated into every independent claim of the ‘323 Patent to obtain the patent. The court therefore concludes the inventor did disclaim the scope of his invention. Specifically, he disclaimed any position of the pulley that (1) is not offset from the pivot point, (2) with a parallel axes of rotation, (3) such that the cable tension does not vary.

### **C. Application of a Disclaimer to a Continuation Patent**

#### *i. Same Claim Terms*

ICON contends even if there was a disclaimer, the “cable tension” limitation still was not incorporated into the ‘061 Patent. A continuation patent may have “broader claims than were allowed in the parent.” *Hakim v. Cannon Group, PLC*, 479 F.3d 1313, 1317 (Fed. Cir. 2007) (citation omitted). Moreover, absent “clear evidence to the contrary,” a presumption exists that a patent “examiner [has] assured himself of the patentability of new claims.” *Id.* (citation omitted). This means that a disclaimer in the parent patent does not automatically extend to a continuation patent. Indeed, “a prosecution disclaimer will only apply to a subsequent patent if that patent contains the same claim limitation as its predecessor.” *Regents of the Univ. of Minn. v. AGA Med. Corp.*, 717 F.3d 929, 943 (Fed. Cir. 2013) (citation omitted). “[W]hen the purported disclaimers made during prosecution are directed to specific claim terms that have been omitted or materially

altered in subsequent applications . . . those disclaimers do not apply.” *Id.* (quotations, citation, and alterations omitted). Thus, “the proper inquiry is whether the scope of the claim limitation is substantially the same in the subsequent application as it was in the earlier application.” *Id.* at 944 (citation omitted).

In this case, when the inventor filed the continuation application, he incorporated the offset and parallel axes of rotation elements. But he omitted the cable tension limitation. ICON therefore contends the limitation cannot apply due to its omission. The court disagrees. The cable tension limitation is not the phrase that was narrowed by a disclaimer. It is the disclaimer. The inventor inserted the disclaimer during prosecution of the ‘323 Patent to narrow the offset and parallel axes of rotation elements. It was not enough that the pulley be structurally separate from the pivot point or that it have a parallel axis of rotation. The inventor required the offset and parallel axes to be such that the cable tension did not vary. Any other position of the guide pulley that did not accomplish this purpose was disclaimed. Thus, the specific claim terms to which the disclaimer attached were offset and parallel axes of rotation. When the inventor then used the same claim terms (namely, offset and parallel axes of rotation) in the ‘061 Patent, the disclaimer still attached to those terms even though the inventor did not expressly include the particular disclaimer language.

*ii. Rescission*

Once an applicant narrows a claim term by disclaimer, the “applicant cannot recapture claim scope that was surrendered or disclaimed.” *Hakim*, 479 F.3d at 1317. An exception exists, however, if the disclaimer is rescinded. To rescind, “the prosecution history must be sufficiently clear to inform the examiner that the previous disclaimer, and the prior art that it was made to avoid, may need to be re-visited.” *Id.* at 1318 (citation omitted).

*Hakim* is informative about whether ICON rescinded the disclaimer during prosecution of the ‘061 Patent. In *Hakim*, the Federal Circuit addressed whether the hole in a flexible valve could be any type of opening or whether it had to be a slit. *Id.* at 1315–16. It found that the opening had to be a slit due to prosecution disclaimer. After Hakim received a notice of allowance, he filed a continuation application wherein two claims merely referred to an “opening” rather than a slit. *Id.* at 1316. The attorney letter accompanying the application informed the examiner that Hakim was broadening the claims by changing “slit” to “opening.” *Id.* The examiner allowed the claims “without any comment or rejection.” *Id.* The trial court concluded the letter was insufficient to rescind Hakim’s disclaimer, and the Federal Circuit affirmed. *Id.* at 1316–17.

Here, after the inventor received a Notice of Allowance for the ‘323 Patent, the inventor filed the ‘061 continuation patent application. With respect to the first extension arm, Claim 1 required that the pulley be offset such that the cable tension did not vary. ‘061 Prosecution History, at 23 (Dkt. No. 82-3). The “cable tension” limitation was omitted, however, with respect to the second extension arm. *Id.* Six days later, before the PTO had taken any action on the continuation application, the inventor seemingly “corrected” his application by also deleting the “cable tension” phrase with respect to the first extension arm. *Id.* at 47. But for the omission of the “cable tension” phrase, Claim 1 of the continuation application was identical to Claim 20 of the ‘323 Patent. ‘061 Prosecution History, at 23, 47 (Dkt. No. 82-3). The PTO rejected the claim based on double patenting, but it cited to Claim 15 of the ‘323 Patent as being “not patentably distinct.” *Id.* at 57. The inventor then filed a terminal disclaimer and corrected some typographical errors to overcome the rejection. *Id.* at 86. After doing so, the PTO allowed the claim without further discussion. *Id.* at 96.

The prosecution history of the '061 is even less specific than that in *Hakim* for there was no attorney letter informing the PTO that the inventor was broadening the claims. Even the “correction” that deleted the cable tension disclaimer was insufficient to alert the examiner that the prior art may need to be re-visited. The court therefore concludes the inventor did not rescind the disclaimer.

## II. LITERAL INFRINGEMENT

After a court construes the claims, the second part of an infringement analysis is to “apply the properly construed claims to the accused device.” *Alcohol Monitoring Sys.*, 414 Fed. Appx. at 298 (citation omitted). ICON moves for summary judgment that Vectra has literally infringed Claim 1 of the '061 Patent. In turn, Vectra moves for summary judgment that it has neither infringed the '323 Patent nor the '061 Patent.

Literal infringement requires an accused device to read on every element of a particular claim. If even one element is missing, there is no literal infringement. *See Builders Concrete v. Bremerton Concrete Prods. Co.*, 757 F.2d 255, 257 (Fed. Cir. 1985) (stating “[l]iteral infringement requires that the accused device embody every element of the claim”). Vectra has provided evidence that the cable length on its product varies by as much as 4 inches when the extension arm is selectively rotated. It is unclear, however, whether the cable tightens or loosens due to variance in the force or stress placed on it as the arm is rotated. Neither party has provided sufficient evidence for the court to determine that point. Accordingly, on the present record, that issue remains open. A separate element, however, is dispositive on the issue of literal infringement.

The specific language at issue in Claim 1 states “the first end of the first extension arm further *including* a pulley.” *Id.* at col. 8:5 7 (emphasis added). This limitation is found in each of the independent claims of both patents. The word “including” means “the listed elements . . . are

essential.” *Lucent Techs., Inc. v. Gateway, Inc.*, 525 F.3d 1200, 1214 (Fed. Cir. 2008). Thus, Vectra’s product must have an extension arm that contains a pulley for this element to be met. Because the pulley on Vectra’s product is located on the flange, and the court has concluded the flange is not part of the extension arm, Vectra’s product does not meet this element. Accordingly, Vectra’s product does not literally infringe either patent.

### **III. DOCTRINE OF EQUIVALENTS**

#### **A. Standard**

ICON asserts that even if Vectra has not literally infringed Claim 1 of the ‘061 Patent, it nevertheless has done so under the doctrine of equivalents. “[A] patentee may establish infringement under the doctrine of equivalents if an element of the accused device performs substantially the same function in substantially the same way to obtain the same result as the claim limitation.” *EMD Millipore Corp.*, 768 F.3d at 1202 (quotations and citation omitted). “Equivalency may also be proven where the differences between the invention as claimed and the accused product . . . are insubstantial.” *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1297 (Fed. Cir. 2009) (citation omitted). The equivalents analysis “proceeds element-by-element.” *Id.* at 1296. “[A] generalized showing of equivalency between the claim as a whole and the allegedly infringing product . . . is not sufficient to show infringement.” *Id.* (citation omitted). Moreover, the doctrine cannot be used to ignore or vitiate “individual claim elements.” *Id.* at 1297 (citation omitted).

Determining whether a product simply performs substantially the same function, in substantially the same way, to obtain the same result as the claim limitation versus vitiating a claim element is not always obvious. The Supreme Court has cited with approval the following guideline to help with this determination:

A distinction can be drawn that is not too esoteric between substitution of an equivalent for a component *in* an invention and enlarging the metes and bounds of the invention *beyond* what is claimed.

....

[C]ourts have no right to enlarge a patent beyond the scope of its claims as allowed by the Patent Office. The “scope” is not enlarged if courts do not go beyond the substitution of equivalent elements.

*Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997) (quoting *Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 62 F.3d 1512, 1573–74 (Nies, J., dissenting) (emphasis in original) (alterations omitted)). The court further explained:

What constitutes equivalency must be determined against the context of the patent, the prior art, and the particular circumstances of the case. Equivalence, in the patent law, is not the prisoner of a formula and is not an absolute to be considered in a vacuum. . . . Consideration must be given to the purpose for which an [element] is used in a patent, the qualities it has when combined with the other [elements], and the function which it is intended to perform. An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was.

*Id.* at 24–25 (quoting and declining to overrule *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 612 (1950) on these points of consideration). Finally, it is an issue of fact whether an accused element is equivalent to a claimed element, but it is a matter of law whether a claimed element would be vitiated by applying the doctrine of equivalents. *Id.* at 38–39 & n.8.

## **B. Application to Extension Arm**

In this case, the issue is not whether Vectra’s flange and ICON’s extension arm are equivalent. Instead, the issue is whether placing the pulley on the flange is equivalent to placing it on the arm. As discussed above, the inventor distinguished prior art by offsetting the guide pulley from the pivot point, with parallel axes of rotation, such that the cable tension did not vary. While

location of the guide pulley was critical, it arguably was for reasons other than it being located on the extension arm. ICON therefore *may* be able to argue that prosecution history estoppel does not bar it from asserting it is equivalent to locate the pulley on the flange in Vectra's product. *Warner-Jenkinson Co.*, 520 U.S. at 33. Additionally, the particular design of Vectra's product raises the question whether a person reasonably skilled in the art would have known of the interchangeability of placing the pulley on the flange instead of the extension arm. Vectra argues they are not interchangeable because the extension arm on Vectra's product may be removed and its product will still function while ICON's would not. If anything, this supports the guide pulley's location on Vectra's product is equivalent to the guide pulley location of ICON's invention because it arguably functions in the same manner. The court therefore concludes that material issues of fact exist about whether the guide pulley on the accused product is equivalent to the claimed element. Accordingly, the court denies Vectra's motion for summary judgment.

### **CONCLUSION**

For the reasons discussed above, the court DENIES ICON's motion for partial summary judgment (Dkt. No. 22) and GRANTS IN PART and DENIES IN PART Vectra's summary judgment motion (Dkt. No. 82). Specifically, the court grants Vectra's motion on the issue of literal infringement because the flange is not part of the extension arm, and thus, the extension arm on Vectra's product does not include a pulley. The court denies the motion on the issue of the doctrine of equivalents because material issues of fact are in dispute. If ICON is able to prove locating the guide pulley on the flange is equivalent to locating the guide pulley on the extension arm, it will then have to prove that Vectra's product meets the "cable tension does not vary" requirement to prevail on its infringement claims. Conversely, if Vectra is able to show that its product does not meet the

cable tension requirement, then it may prevail on its defense of non-infringement even if locating the pulley on the flange is equivalent to locating the pulley on the extension arm.

DATED this 6<sup>th</sup> day of July, 2015.

BY THE COURT:

A handwritten signature in blue ink, appearing to read "Clark Waddoups", is written over a horizontal line.

Clark Waddoups  
United States District Judge